

21 May 02

DEPARTMENT OF THE AIR FORCE
Air and Space Basic Course (AETC)
Maxwell Air Force Base, Alabama 36112

LESSON PLAN

A1710, BLUE THUNDER II INTRODUCTION AND FAMILIARIZATION

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RECORD OF CHANGES

CHANGE NUMBER	REMARKS
New Lesson	Supercedes ASBC lesson A1710 dated 4 Mar 02

SUMMARY OF CHANGES

EDUCATIONAL GOALS

A1000 Area Objective: Apply aerospace power capabilities and officership principles to warfighting.

A1700 Phase Objective: Apply Joint aerospace operations planning and execution tools effectively to complete the Blue Thunder wargame.

A1710 - BLUE THUNDER II INTRODUCTION AND FAMILIARIZATION

Lesson Objective 1: Know the definition of wargaming.

Sample of Behavior:

(R/S) 1.1 - State the Air Force definition of a wargame.

Lesson Objective 2: Know the purpose of wargaming.

Samples of Behavior:

(R/S) 2.1 - State uses of wargaming in military history.

(R/S) 2.2 - State uses of wargaming in Air Force history.

(R/S) 2.3 - State impact of wargaming on aerospace doctrine.

(R/S) 2.4 - State impact of wargaming on aerospace strategy.

Lesson Objective 3: Know the purpose of the Blue Thunder II (BT II) wargame.

Sample of Behavior:

(S) 3.1 - Describe the purpose of the BT II wargame.

Lesson Objective 4: Comprehend the BT II concept of operations.

Sample of Behavior:

(S) 4.1 - Describe the BT II concept of operations.

Lesson Objective 5: Comprehend the BT II Intel View Tools.

Sample of Behavior:

(S) 5.1 - Describe BT II Intel Tools.

Lesson Description: This lesson introduces the student to BT II. First, it covers the purpose of wargaming and explains what the student should expect from BT II. Next, it introduces the BT II concept of operations and an outline of a typical day's activities during BT II, as well as, student roles and responsibilities. Next the students will be introduced to some of the tools that will be used during BT II. Specifically INTELINK and ForceView. Finally, the students will be briefed on the hazards of the BT site to include inclement weather and bus options.

Prerequisites: None

Preparation: Read A1710, Blue Thunder II Introduction and Familiarization.
Read Atlantis Background Information.

Optional: N/A

Rationale/Linkage: This block lays the foundation students need for a successful experience in BT II. Through the reading and class discussion, the students should understand the history of wargaming and its purpose in today's military. The classroom presentation will also provide a fundamental understanding of the actual activities that will be involved executing BT II. Finally, the BT II site is introduced. The students are given basic information on the BT site concerning animals, insects, inclement weather, and bus operations.

INSTRUCTIONAL PLAN

1. TITLE AND LENGTH OF LESSON: BLUE THUNDER II
INTRODUCTION & FAMILIARIZATION, (2:00)

2. RELATION TO OTHER INSTRUCTION: The lesson bridges the gap between the concepts introduced in phases one through three and their application in phase four. The students will cover the required information relating to Blue Thunder operations. You must ensure the students understand the importance of the structure of the Air Operations Center (AOC) and its inclement weather options.

3. GENERAL METHOD OF INSTRUCTION:

a. Presentation Method: Guided Discussion / Performance

b. Time Outline:

Segment Time	Total Time	Description
0:05	(0:05)	Introduction
0:10	(0:15)	MP I: Why Wargaming?
0:30	(0:45)	MP II: Conceptual Overview
0:45	(1:30)	MP III: Introduction to INTELINK and Forceview
0:25	(1:55)	MP IV: Site Overview
0:05	(2:00)	Conclusion

c. Instructor Preparation:

- Review lesson plan
- Read A1710-R1 thru 6
- Be familiar with Atlantis scenario and planning documents
- Be familiar with INTELINK and ForceView

d. Instructor Aids/Handouts:

- Slides

e. Student Preparation:

- Read A1710-R1 thru 6
- Read Atlantis Background Information

f. Strategy: This lesson moves from a broad focus on general wargaming concepts to the specifics of the BT II wargame and the tools used during execution. The lesson begins with a short discussion based on the reading. The discussion should ensure the knowledge level objectives on wargaming fundamentals are met. When the Flight Commander is satisfied with the responses, the discussion transitions to the BT II wargame. Here the conceptual overview of the wargame is covered. It covers what a typical day entails as well as the key players involved in the process. Next, the two key tools, INTELINK and ForceView, are introduced. To wrap things up, a quick overview of the key players and the BT site occurs. Finally, the students are review the purpose of Blue Thunder.

g. References:

N/A

4. DETAILS OF INSTRUCTION

a. Introduction: 0:05 (0:05)

{Instructor Notes: Ensure that you have released your two individuals to attend your squadrons' GUI training (2:00).}

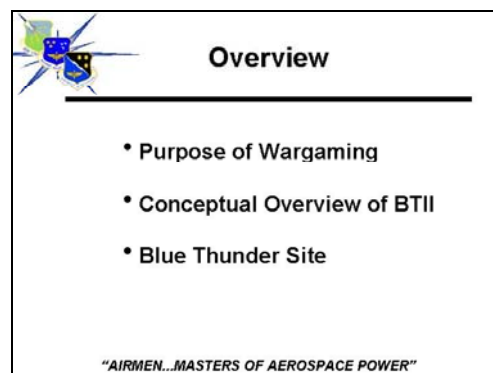
1) //Attention//

The northern border skirmishes between Neptune and Poseidon concerning the disputed oil region have escalated. Both governments have vowed to take any steps necessary to restore their rightful claims to the oil rich regions and will no longer tolerate any infringement by the other. You are now members of the Poseidone/Neptunian Air Planning Staff. Your job over the next few days is to put together a campaign plan and more importantly a Master Air Attack Plan to meet your countries objectives. Welcome to Blue Thunder II.

2) //Motivation//

Wargames have been around since ancient times with some of the first stylized one being Chess and Go. Wargames are a valuable tool for the military professional in that they aid in historical study, problem solving, plan development, and significant cost savings over fielded exercises. Due to these factors it is important that you, as the Air Force leaders of tomorrow, understand the uses and advantages of wargames.

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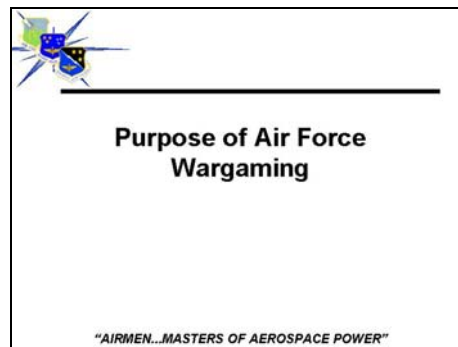


3) //Overview//

To fully understand wargames in general and Blue Thunder II specifically, you have to have a little background. To start with, we are going to examine how the Air Force defines a wargame. Then we will look closely at the purpose of wargames and how they have affected our military history. As you might imagine, if wargames have had an effect on our Air Force history, then those effects have had a hand in shaping our aerospace doctrine and strategy. Once we have examined wargames in general we will look at the conceptual overview of Blue Thunder II. Lastly we will have a quick run through of the Blue Thunder Site.

b. MP I: Why Wargaming?: 0:10 (0:15)

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QUESTIONS

Lead Off Question (LOQ):

How does the Air Force define a wargame?

ANTICIPATED RESPONSES (AR)

- A simulation, by whatever means, of a military operation involving two or more opposing forces, using rules, data, and procedures designed to depict an actual or assumed real life situation.

- A military simulation that has a live, thinking opponent
- A depiction of a past, or possible future, military operation that is played out by opposing players

Follow-Up-Question (FUQ):

Name some historical examples of Wargaming.

- Kaiser Wilhelm wargaming with his officers along possible invasion corridors through France/Belgium (World War I)
- The Japanese planning for the strike on Pearl Harbor and the Battle of Midway
- The Japanese planning for the strike on the battle of Midway
- The Germans trying to figure out where the allied invasion of Western Europe would take place

FUQ:

How has the Air Force used Wargaming?

- The Checkmate planning cell preparing for DESERT STORM
- Blue Flag at Hulbert Field, FL to improve Air Operation Center (AOC) coordination/function
- Wargames at Air University schools

FUQ:

How have wargames impacted Air Force doctrine and strategy?

- The results of the DESERT STORM air campaign, which came from the

wargame INSTANT THUNDER air campaign plan laid the foundation for our current doctrine for air operations

- Early Air Combat Tactical School (ACTS) wargames shaped the doctrine and strategy employed in World War II
- Wargames performed at Air University schools help shape our doctrine and strategy today and in to the next century

FUQ:

What is the purpose of the Blue Thunder II wargame?

{Instructor Notes: This could be used as a rhetorical question, but it may be insightful to see what the students are thinking.}

- To practice the principles and concepts we have learned in the course
- To learn the value of wargames to planning air operations

(TRANSITION): NOW WITH OUR OBJECTIVE FOR BLUE THUNDER IN MIND, LET'S TAKE A LOOK AT THE OVERALL CONCEPT OF OPERATIONS FOR BLUE THUNDER II AND SEE WHAT WE WILL BE DOING FOR THE NEXT FEW DAYS.

c. MP II: Conceptual Overview of Blue Thunder II: 0:30 (0:45)

*{Instructor Note: Some slides build as you click for the next slide. You will know when this happens by the **(Build)** statement.}*

Show Slide:



Lets start by looking at an overview of a typical BTII day.

(BUILD) The BT II Wargame is split into two basic phases. The first phase lasts one day, and is set up to allow each flight to develop their campaign plan and brief it to their JFACC. The second phase lasts two days and is your opportunity to experience the Master Air Attack Planning (MAAP) process. This is where you will develop your Air Tasking Order that will be flown against your opponent.

{Instructor Notes: Have Attachment 1 ready to show the students.}

This attachment that I will hand out a little later provides you with a very detailed description of what will be required of you at any given time during BT.

LOQ:

What are some considerations for developing your campaign plan?

- Overall objectives for the campaign.
- Overall strategy, i.e. defensive, offensive, etc.
- What aircraft will you make available for tasking?

FUQ:

What type of aircraft do you need for a more offensive strategy? Defensive?

- Offensive – More bombers and air to ground attack aircraft.
- Defensive – Fewer bombers and more air-to-air aircraft.

FUQ:

What items should be considered?

- Logistics, e.g. fuel, spare parts, munitions, etc.
- Airlift assets available.
- Enemy threats, i.e. proximity to ground units, missile bases, SOF units, and range of enemy aircraft.

(TRANSITION): ON THE SECOND AND THIRD DAYS, WE WILL BE ABLE TO USE THE FORCES YOU HAVE IN PLACE AND BEGIN TO EXECUTE YOUR STRATEGY. YOU WILL BE USING THE MASTER AIR ATTACK PLANNING (MAAP) PROCESS TO DO THIS.

(BUILD) We are using a modified MAAP process. While we cannot possibly replicate the entire MAAP process, we can give you an idea of some of the major considerations that go into the MAAP.

LOQ:

What are the simplified inputs to the MAAP?

- Initial aircraft allocation and resources.
- Support requests from CINC
- The MTL and weaponizing solutions.

All of these types of inputs will be simulated in one way or another during BTII.

FUQ:

What is the output of the MAAP?

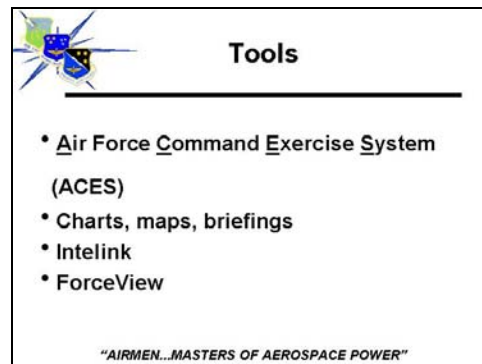
- Air Tasking Order

The air tasking order is the major output. Proper packaging and sequencing of aircraft against enemy targets define the path to a successful ATO and air campaign.

(TRANSITION): HOW WILL WE ACCOMPLISH THESE TASKS OF PACKAGING AND SEQUENCING? LETS SHOW YOU THE TOOLS THAT YOU WILL BE USING DURING PLANNING AND EXECUTION.

d. MP III: Introduction to INTELINK and ForceView: 0:45 (1:30)

Show Slide:



(BUILD) The primary computer based tool we are using is the Air Force's Command Exercise System or ACES wargame engine. ACES is a model that simulates air, ground, and naval conflict by allowing the user to enter orders that simulate maneuver of military forces. We will be focusing on the air and space capabilities of the engine only. In the Air Planning phase, we will be able to request satellite imagery to aid you in the next days planning. It is in the Air phase (Execution) of ACES that we will package and sequence our forces against targets. The two students released at the beginning of class are being trained to use the Graphic User Interface (GUI).

(BUILD) You will have one or two Atlantis Operational Navigation Charts (ONC), 1 Student Blue Thunder Procedures Guide, and four briefing templates. These tools will aid in planning and briefing your plans to the JFACC. The ONC's are a great tool for showing your JFACC the lay of the land as well as your overall strategy

(BUILD) ForceView is used to analyze the force structure of all the stationary targets in theater. With it, you can see the relative location of targets, ground to air threats in any area, and relationships between the different components of the Integrated Air Defense Systems. This information is also supplemented by information on the Intelink Website.

***{Instructor Notes:** At this point, minimize the slide show and run the Force View program. Load your enemy countries data. Step them through several examples:*

- 1) How to reduce the number of items on the screen at a given moment*
- 2) The connectivity between the different parts of the IADS*
- 3) The threat rings of the different Surface to Air Missile Sites*

Make sure they have a good grasp of what ForceView is all about. It is a great tool for targeting}

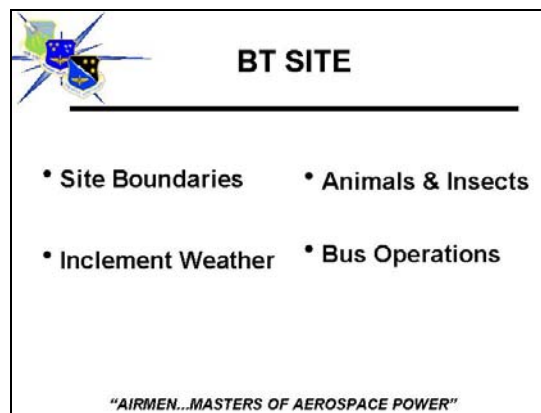
(BUILD) Intelink is a web based information tool for BT. In it you will find country studies, weaponeering information, Frequently Asked Questions (FAQ), and the ACES User's Manual. You can get to the Intelink website by going through IGECKO.

***{Instructor Notes:** At this point, minimize the slide show and step them to the INTELINK website on IGECKO. Move through several pages of INTELINK to show them the data they have available to them. This would also be a good time to tell them not to print everything.}*

(TRANSITION): SOME OF YOU MAY HAVE SEEN THE BT SITE AT THE NORTH END OF THE RUNWAY. SINCE THE SITE IS LOCATED IN A VERY SENSITIVE PART OF THE AIRFIELD, WE NEED TO ENSURE THAT WE COVER SOME SAFETY INFORMATION BEFORE WE GO OUT THERE.

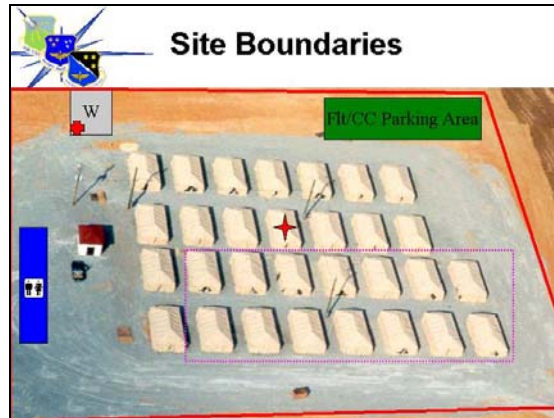
e. MP IV: Site Overview: 0:25 (1:55)

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Here are the main areas we will cover. Let's start with the camp layout.

Show Slide:



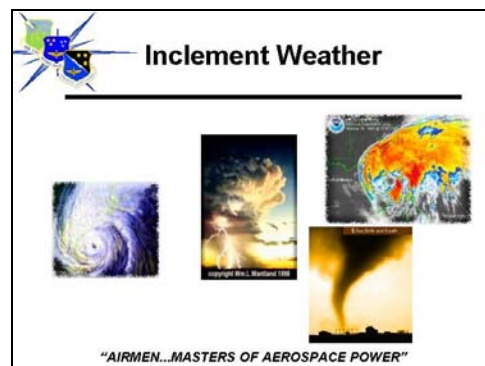
We'll start with the camp boundary. The tent area has a perimeter fence. All students are to remain on the BT site during class hours.

The tents are your homes while you are out in the site. There will be a command tent designated the first day of Blue Thunder. This tent is off limits to students.

Not pictured but marked, is our warehouse storage facility. This is our first aid building and our equipment issue/turn-in area.

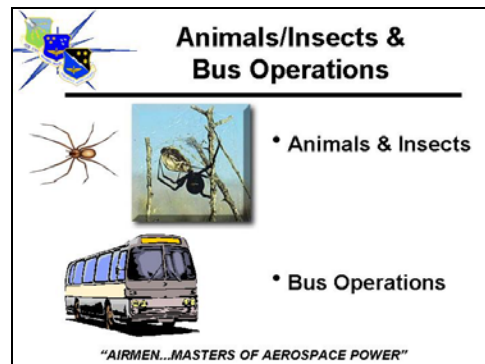
Lastly you can see where the bathroom facilities will be located. Lets move on to weather information.

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Inclement weather is always a concern here in Alabama. If we aren't dealing with the heat of summer, we're trying to reason with hurricane season. In the event of severe weather, you will be directed what to do by your flight commander and the public address system. *(If it appears that heat may be a problem, review hot weather concerns with your students.)*

Show Slide:



Animals and insects are definitely a concern for us at Blue Thunder. Exercise caution when rolling the tent flaps or when first entering the tent. The tents are sprayed at least a week before BT, but they can't get them all. Black Widow spiders are regular inhabitants of the tents. If you find any animal in your tent, leave and let the staff know so we can bring in the proper personnel to handle it. If you have any encounter with a critter, bites especially, let your flight commander know so we can provide you with the proper treatment.

All students **(NO EXCEPTIONS)** will be bussed to and from the BT site. This is primarily for safety reasons. Make sure you know what your bus pick up time is for the next day.

f. Conclusion: 0:05 (2:00)

1) //Summary//

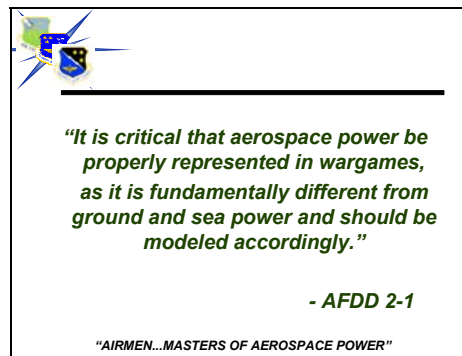
We have covered the basics of BT II and the Blue Thunder site. . You should now have an understanding of the purpose and some of the reasons that we as professional military officers wargame.

2) //Re-motivation//

On Monday, you will begin planning for BT II and selecting the elements of your own Air Expeditionary Force (AEF) to fight in theater. Monday's planning session will lay the foundation of your campaign plan for this conflict. The next two days will be entirely for Master Air Attack Planning (MAAP). At the end of each day the ACES engine will adjudicate the orders you have entered. First thing the following day, you will receive the results of the previous days planning. On the next day you will begin the building of your MAAP and ATO (remember no plan survives first contact with the enemy). Once that MAAP has been briefed to your JFACC, you will finalize the plan and enter it into the GUI. The next morning you will again get results from the previous day's work. The third day runs just like the second day. You will adjust you plan as you need to based on these results. The last day, you will get to debrief the whole process with your enemy and the JFACC.

3) //Closure//

Show Slide:



You can see that our doctrine clearly sites the importance of modeling the Air Force's way of war. Next week, you will see and understand this importance firsthand. Remember the lessons you have learned so far. Your overall goal here is to try to apply the concepts we have covered at ASBC. This wargame should stir debate and discussion, sometimes heated, about how we fight. Victory, in this wargame, is not determined by who kills the most enemy troops or breaks the most toys, but by those that generate the most honest and thorough discussion of Aerospace power and how to employ it. Have a great weekend.